

CLAIMS

1. A liquid, aqueous composition comprising
 - (i) A factor VII polypeptide;
 - (ii) An agent suitable for keeping pH in the range of from about 4.0 to about 8.0;
 - (iii) An agent selected from the list of: a calcium salt, a magnesium salt, or a mixture thereof;wherein the concentration of (iii) is at least 15 mM.
2. A composition according to claim 1, further comprising (iv) a ionic strength modifying agent
3. A composition according to claim 2, wherein the ionic strength modifying agent (iv) is selected from the list of: a neutral salt, e.g., sodium chloride; an amino acid; or a small peptide, or a mixture of at least two of said modifying agents.
4. A composition according to claim 3, wherein the ionic strength modifying agent (iv) is sodium chloride.
5. A composition according to claim 1, wherein the agent (iii) is present in a concentration of at least about 25 mM.
6. A composition according to claim 2, wherein the agent (iv) is present in a concentration of at least about 5 mM.
7. A composition according to claim 1, wherein the calcium salt is selected from the group consisting of: calcium chloride, calcium acetate, calcium gluconate, and calcium laevulate.
8. A composition according to claim 1, wherein the magnesium salt is selected from the group consisting of: magnesium chloride, magnesium acetate, magnesium sulphate, magnesium gluconate, and magnesium laevulate.
9. A composition according to claim 6, wherein agent (iii) is selected from the list of: calcium chloride, calcium acetate, magnesium chloride, magnesium acetate, magnesium sulphate, or a mixture thereof; and wherein agent (iv) is sodium chloride.
10. A composition according to claim 1, further comprising (v) a tonicity modifying agent.

11. A composition according to claim 10, wherein the tonicity modifying agent (v) is selected from the group consisting of: a neutral salt; a mono-, di- or polysaccharide; a sugar alcohol; an amino acid; or a small peptide, and a mixture of at least two of said modifying agents.
- 5 12. A composition according to claim 10, wherein the tonicity modifying agent (v) is present in a concentration of from 1 mM to 500 mM
13. A composition according to claim 12, wherein the concentration is 10 – 250 mM.
- 10 14. A composition according to claim 1, further comprising (vi) a non-ionic surfactant.
15. A composition according to claim 14, wherein the non-ionic surfactant is a polysorbate or a poloxamer or a polyoxyethylene alkyl ether.
- 15 16. A composition according to claim 1, further comprising (vii) an antioxidant
17. A composition according to claim 16, wherein the antioxidant (vii) is selected from the group consisting of: L- or D-methionine, a methionine analogue, a methionine-containing peptide, a methionine-homologue, ascorbic acid, cysteine, homocysteine, glutathione, cystine, and
- 20 cysstathionine.
18. A composition according to claim 17, wherein the antioxidant is L-methionine.
19. A composition according to claim 16, wherein the antioxidant is present in a concentration of
- 25 from about 0.1 to about 5.0 mg/ml.
20. A composition according to claim 1, wherein pH is kept in the range of from about 4.0 to about 7.0.
- 30 21. A composition according to claim 1, wherein the agent suitable for keeping pH in the range of from about 4.0 to about 7.0 is selected from the group consisting of acids and salts of: citrate, acetate, histidine, malate, phosphate, tartaric acid, succinic acid, MES, HEPES, Imidazol, TRIS, lactate, glycylglycin, PIPES, glycine, or a mixture of at least two of said agents.
- 35 22. A composition according to claim 21, wherein the concentration of the agent is from about 1 mM to about 50 mM.

23. A composition according to claim 22, wherein the concentration of the buffer is about 10 mM.

24. A composition according to claim 1, further comprising (viii) a preservative selected from the group consisting of phenol, benzyl alcohol, orto-cresol, meta-cresol, para-cresol, methyl paraben, propyl paraben, benzalconium chloride, and benzaethonium chloride.

25. A composition according to claim 1, wherein said factor VII polypeptide is stable for at least 6 months at 2-8°C.

10

26. A composition according to claim 1,, wherein the factor VII polypeptide is recombinantly made human factor VIIa.

27. A composition according to claim 1, wherein the factor VII polypeptide is a factor VII sequence variant.

15

28. A composition according to claim 27, wherein the ratio between the activity of the factor VII polypeptide and the activity of native human Factor VIIa (wild-type FVIIa) is at least about 1.25, when tested in an In Vitro Proteolysis Assay.

20

29. A composition according to claim 1, wherein the factor VII polypeptide is present in a concentration of from about 0.1 mg/ml to about 10 mg/ml.

30. A method for preparing a liquid, aqueous composition of a factor VII polypeptide, comprising the step of providing the factor VII polypeptide in a solution comprising (ii) an agent suitable for keeping pH in the range of from about 4.0 to about 8.0; (iii) an agent selected from the group consisting of: a calcium salt, a magnesium salt, or a mixture thereof; wherein the concentration of (iii) is at least 15 mM.

25

31. A method for treating a factor VII-responsive syndrome, the method comprising administering to a subject in need thereof an effective amount of an aqueous liquid composition comprising (i) a factor VII polypeptide, (ii) an agent suitable for keeping pH in the range of from about 4.0 to about 8.0; (iii) an agent selected from the group consisting of: a calcium salt, a magnesium salt, or a mixture thereof; wherein the concentration of (iii) is at least 15 mM.

30

35

32. A method for reducing degradation of Factor VII in a pharmaceutical formulation, said method comprising providing a solution of Factor VII comprising an agent selected from the

group consisting of: a calcium salt, a magnesium salt, or a mixture thereof; wherein the concentration of said agent is at least about 200 mM.

33. A method according to claim 32, wherein said concentration is at least about 400 mM.

5

34. A method according to claim 32, wherein said agent comprises Ca^{+2} at a concentration of at least about 2 mM.

35. A method for reducing degradation of Factor VII in a pharmaceutical formulation, said
10 method comprising providing a solution of Factor VII having an ionic strength of at least about 200 mM.

36. A method according to claim 35, wherein said ionic strength is at least about 400 mM.

15 37. A method according to claim 36, wherein said ionic strength is at least about 600 mM.